

Title (en)
AN ELECTRO-MECHANICAL BRAKE UNIT, PREFERABLY FOR A RAIL VEHICLE

Publication
EP 0334434 A3 19910424 (EN)

Application
EP 89200668 A 19890317

Priority
SE 8801026 A 19880321

Abstract (en)
[origin: EP0334434A2] An electro-mechanical brake unit includes a drive sleeve (8), which may be subjected to a torque, for example from a coil spring (6), and a ball screw (15, 25) for transforming the torque into an axial force for brake application. Between the drive sleeve and the ball screw there is a control arrangement, comprising an outer locking spring (16), a control sleeve (17), and an inner locking spring (18), a control motor (20) being connected to the control sleeve for rotation thereof in either direction. The control sleeve is connected to the locking springs for control of their locking and unlocking functions.

IPC 1-7
B60T 13/74; **B60T 13/04**; **B61H 13/00**; **F16D 59/02**; **B60T 17/08**; **F16D 65/34**

IPC 8 full level
B60T 13/04 (2006.01); **B60T 13/74** (2006.01); **B60T 17/08** (2006.01); **B61H 13/00** (2006.01); **F16D 59/02** (2006.01); **F16D 65/14** (2006.01); **F16D 65/18** (2006.01); **F16D 65/28** (2006.01); **F16D 66/00** (2006.01)

CPC (source: EP KR US)
B60T 13/04 (2013.01 - EP US); **B60T 13/743** (2013.01 - EP US); **B60T 17/08** (2013.01 - EP US); **B61H 7/08** (2013.01 - KR); **B61H 13/00** (2013.01 - EP US); **F16D 59/02** (2013.01 - EP US); **F16D 65/18** (2013.01 - EP US); **F16D 65/28** (2013.01 - EP US); **F16D 2066/005** (2013.01 - EP US); **F16D 2121/22** (2013.01 - EP US); **F16D 2121/24** (2013.01 - EP US); **F16D 2121/26** (2013.01 - EP US); **F16D 2123/00** (2013.01 - EP US); **F16D 2125/48** (2013.01 - EP US)

Citation (search report)
• [AD] GB 2141500 A 19841219 - WESTINGHOUSE BRAKE & SIGNAL
• [A] US 4760895 A 19880802 - WICKHAM DAVID J [GB]
• [AD] US 3131788 A 19640505 - NEWELL GEORGE K

Cited by
EP1857705A1; CN105987108A; KR20140030209A; US6666305B1; FR2701523A1; US5388674A; CN106224415A; EP1426645A1; DE19617796A1; FR2748244A1; DE19617796C2; US7565953B2; US6315092B1; US9340194B2; US7014019B2; IT201900024147A1; WO9927270A1; WO2012163447A1; WO0249901A1; WO0121973A1

Designated contracting state (EPC)
AT BE CH DE ES FR GB IT LI NL

DOCDB simple family (publication)
EP 0334434 A2 19890927; **EP 0334434 A3 19910424**; **EP 0334434 B1 19930526**; AR 243828 A1 19930930; AT E89790 T1 19930615; AU 3152289 A 19890921; AU 607850 B2 19910314; BR 8901273 A 19891107; CA 1302308 C 19920602; CN 1010203 B 19901031; CN 1038985 A 19900124; CZ 172489 A3 19950816; CZ 280403 B6 19960117; DE 68906695 D1 19930701; DE 68906695 T2 19930916; ES 2044050 T3 19940101; HU 205310 B 19920428; HU T49530 A 19891030; KR 890014318 A 19891023; KR 960003317 B1 19960308; PL 160492 B1 19930331; PL 278431 A1 19891127; SE 460782 B 19891120; SE 8801026 D0 19880321; SE 8801026 L 19890922; US 4953669 A 19900904; YU 57489 A 19931020; ZA 892133 B 19891129

DOCDB simple family (application)
EP 89200668 A 19890317; AR 31347089 A 19890321; AT 89200668 T 19890317; AU 3152289 A 19890320; BR 8901273 A 19890320; CA 594246 A 19890320; CN 89103109 A 19890320; CS 172489 A 19890321; DE 68906695 T 19890317; ES 89200668 T 19890317; HU 132089 A 19890320; KR 890003423 A 19890320; PL 27843189 A 19890321; SE 8801026 A 19880321; US 32611989 A 19890320; YU 57489 A 19890321; ZA 892133 A 19890321